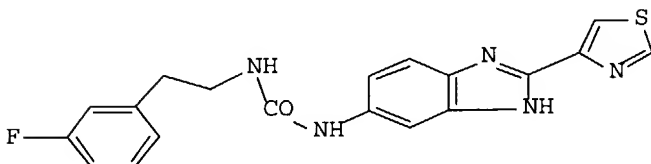
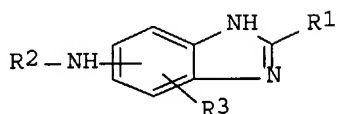


L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:412812 CAPLUS Full-text
 DN 140:406808
 TI Preparation of carbonylamino-benzimidazoles as selective androgen
 receptor modulators
 IN Kim, Yuntae; Spencer, Keith L.; Hanney, Barbara; Duggan, Mark E.
 PA Merck & Co., Inc., USA
 SO PCT Int. Appl., 136 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004041277	A1	20040521	WO 2003-US34345	20031028
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 2002-422914P	P	20021101		
OS	MARPAT 140:406808				
GI					



AB Carbonylamino-benzimidazoles (shown as I; variables defined below; e.g. II) are modulators of the androgen receptor (AR) in a tissue selective manner. They are useful as agonists of the androgen receptor in bone and/or muscle tissue while antagonizing the AR in the prostate of a male patient or in the uterus of a female patient. These compds. are therefore useful in the enhancement of weakened muscle tone and the treatment of conditions caused by androgen deficiency or which can be ameliorated by androgen administration, including osteoporosis, osteopenia, glucocorticoid-induced osteoporosis, periodontal disease, bone fracture, bone damage following bone reconstructive surgery, sarcopenia, frailty, aging skin, male hypogonadism, postmenopausal symptoms in women, atherosclerosis, hypercholesterolemia, hyperlipidemia, obesity, aplastic anemia and other hematopoietic disorders, arthritic condition and joint repair, HIV-wasting, prostate cancer, cancer cachexia, Alzheimer's disease, muscular dystrophies, premature ovarian failure, and autoimmune disease, alone or in combination with other active agents. Although the methods of

preparation are not claimed, 6 example preps. and characterization data for .apprx.150 examples of I are included; nearly all examples contain the thiazol-4-yl group at the 2 position of the benzimidazole. For example, II was prepared from 3-fluorophenethylamine, 1,1'-carbonyldiimidazole and [2-(thiazol-4-yl)-3H-benzimidazol-5-yl]amine, the latter of which was prepared from thiazole-4-carboxylic acid and (4-amino-3-nitrophenyl)carbamic acid tert-Bu ester (preparation described) via amide formation followed by cyclization in 20% aqueous AcOH. For I: R1 = aryl or heterocyclyl; R2 = -(C:O)NR5R6, -(C:O)a(C1-10)alkyl, -(C:O)a(C2-8)alkenyl, -(C:O)a(C2-8)alkynyl, -(C:O)a(C3-10)cycloalkyl, -(C:O)a(C3-8)heterocyclyl, and -(C:O)aaryl; R3 = H, halogen, -(C:O)aOb(C1-10)alkyl, -(C:O)aOb(C2-8)alkenyl, -(C:O)aOb(C2-8)alkynyl, -(C:O)aOb(C3-10)cycloalkyl, -(C:O)aOb(C3-8)heterocyclyl, -(C:O)aObaryl, -(C:O)aNR5R6, -Ob(C:O)NR5R6, -NR5(C:O)aObRb, -NR5(C:O)NR5R6, -NR5S(O)2Rb, -(C:O)OH, trifluoromethoxy, trifluoroethoxy, -Ob(C1-10)perfluoroalkyl, -S(O)2Ob(C1-10)alkyl, -S(O)2Ob(C2-8)alkenyl, -S(O)2Ob(C2-8)alkynyl, -S(O)2Ob(C3-10)cycloalkyl, -S(O)2Ob(C3-8)heterocyclyl, -S(O)2Obaryl, -NR5S(O)2NR5R6, -CN, -NO2, oxo, and -OH; a = 0-1; b = 0-1; addnl. details are given in the claims.

IT 198481-33-3, TSE 424

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(codrug; preparation of carbonylamino-benzimidazoles as selective
androgen receptor modulators)

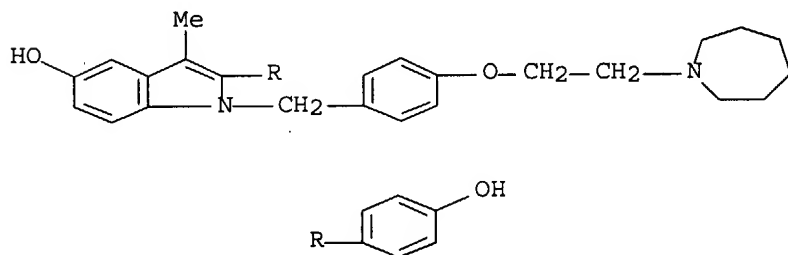
RN 198481-33-3 CAPLUS

CN 1H-Indol-5-ol, 1-[[4-[2-(hexahydro-1H-azepin-1-yl)ethoxy]phenyl]methyl]-
2-(4-hydroxyphenyl)-3-methyl-, monoacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 198481-32-2

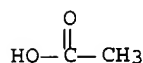
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CM 2

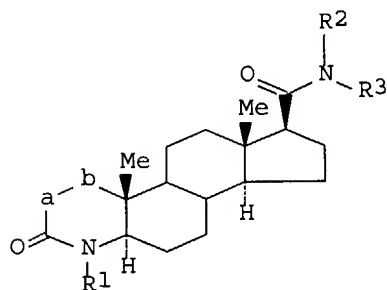
CRN 64-19-7

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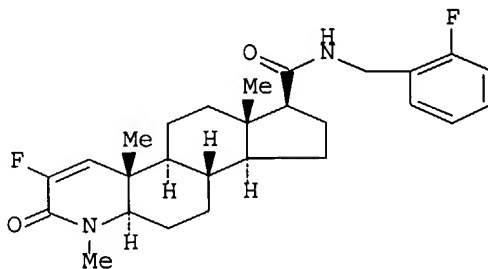


L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:757525 CAPLUS Full-text
 DN 139:277056
 TI Preparation of fluorinated 4-aza-androstan-3-one-17 β -carboxamide
 derivatives as androgen receptor modulators
 IN Meissner, Robert S.; Perkins, James J.
 PA Merck & Co., Inc., USA
 SO PCT Int. Appl., 95 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003077919	A1	20030925	WO 2003-US8277	20030307
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PRAI	US 2002-363822P	P	20020313		
OS	MARPAT 139:277056				
GI					



I



II

AB Fluorinated 4-aza-androstan-3-one-17 β -carboxamide derivs., such as I [a-b = CF:CH, CHFCH₂, CF₂CH₂; R₁ = H, CH₂OH, (un)substituted alkyl; R₂ = H, alkyl; R₃ = alkyl, cycloheteroalkyl, aryl, heteroaryl; R₂R₃ = 5 or 6-membered ring fused with a 5- or 6-membered aromatic ring system having 0-2 heteroatoms], or a pharmaceutically acceptable salt or an enantiomer thereof, were prepared for their use as modulators of the androgen receptor (AR) in a tissue selective manner. Thus, 4-aza-androstan-3-one-17 β -carboxamide derivative II, was prepared via a multiple step reaction sequence starting from 4-methyl-4-aza-androstan-3-one-17-carboxylic acid Me ester and 2-fluoro-benzylamine. The prepared compds. are useful as agonists of the androgen receptor in bone and/or muscle tissue while antagonizing the AR in the prostate of a male patient or in the uterus of a female patient. I are therefore useful in the treatment of conditions caused by androgen deficiency or which can be ameliorated by androgen administration, including osteoporosis, osteopenia, glucocorticoid-induced osteoporosis, periodontal disease, bone fracture, bone damage following bone reconstructive surgery, sarcopenia, frailty,

aging skin, male hypogonadism, postmenopausal symptoms in women, atherosclerosis, hypercholesterolemia, hyperlipidemia, obesity, aplastic anemia and other hematopoietic disorders, inflammatory arthritis and joint repair, HIV-wasting, prostate cancer, cancer cachexia, muscular dystrophies, premature ovarian failure, and autoimmune disease, alone or in combination with other active agents.

IT 198481-33-3, Tse-424

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bone strengthening agents as adjuvant therapeutics; preparation of fluorinated 4-aza-androstan-3-one-17 β -carboxamide derivs. as androgen receptor modulators and their therapeutic uses)

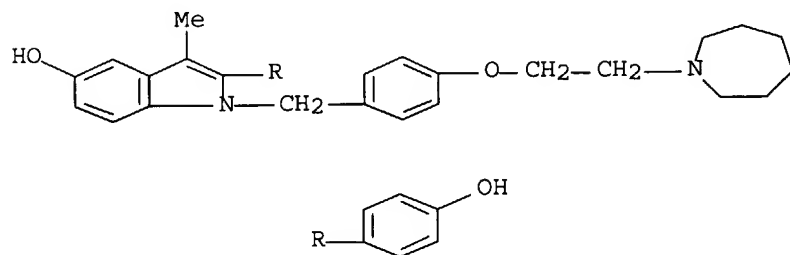
RN 198481-33-3 CAPLUS

CN 1H-Indol-5-ol, 1-[[4-[2-(hexahydro-1H-azepin-1-yl)ethoxy]phenyl]methyl]-2-(4-hydroxyphenyl)-3-methyl-, monoacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 198481-32-2

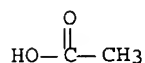
CMF C30 H34 N2 O3



CM 2

CRN 64-19-7

CMF C2 H4 O2



RE.CNT 3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:610255 CAPLUS Full-text
 DN 139:144410
 TI Treatment with selective estrogen receptor modulators (SERMs) in
 conjunction with progestins to suppress cartilage degeneration
 IN Christiansen, Claus; Christgau, Stephan
 PA Nordic Bioscience A/S, Den.
 SO PCT Int. Appl., 89 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003063859	A1	20030807	WO 2003-EP241	20030113
	W:				
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	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				
	PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,				
	UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,				
	RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,				
	CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,				
	NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,				
	ML, MR, NE, SN, TD, TG				

PRAI GB 2002-743 A 20020114
 US 2002-348730P P 20020114
 GB 2002-9495 A 20020425

OS MARPAT 139:144410

AB The present invention relates to the pharmaceutical use of selective
 estrogen receptor modulators (SERMs) alone or in combination with
 progestins for the treatment or prevention of diseases associated with
 elevated cartilage degradation In particular this invention relates to
 the pharmaceutical use of chroman derivs. in combination with
 moretindrone for the treatment or prevention of osteoarthritis or
 rheumatoid arthritis.

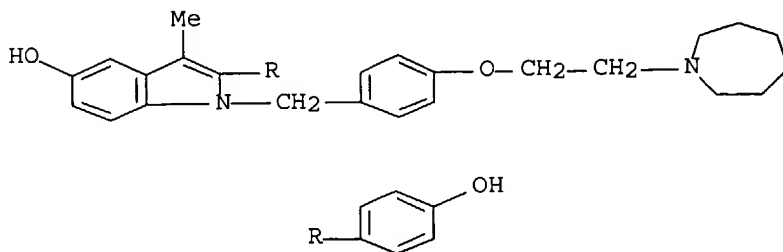
IT 198481-32-2, Bazedoxifene

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)

(treatment with selective estrogen receptor modulators (SERMs) in
 conjunction with progestins to suppress cartilage degeneration)

RN 198481-32-2 CAPLUS

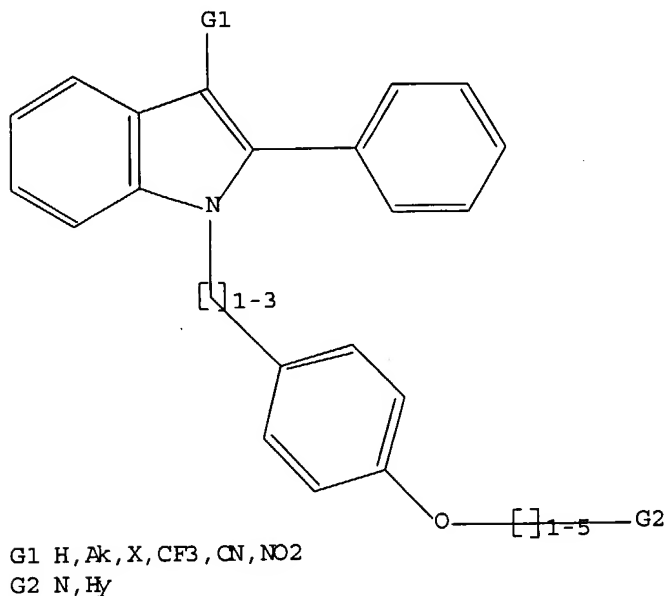
CN 1H-Indol-5-ol, 1-[[4-[2-(hexahydro-1H-azepin-1-yl)ethoxy]phenyl]methyl]-
 2-(4-hydroxyphenyl)-3-methyl- (9CI) (CA INDEX NAME)



RE.CNT 6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Structure attributes must be viewed using STN Express query preparation.

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